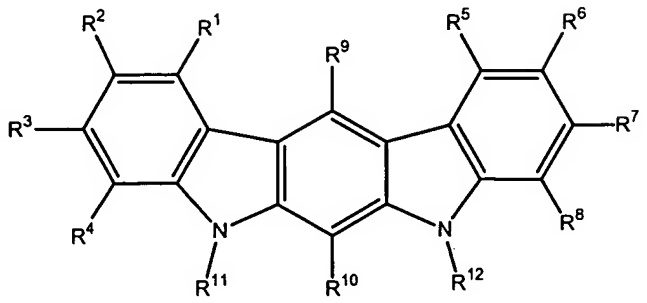
WE CLAIM:

1. A compound having the structure of formula (I)

(I) 

wherein:

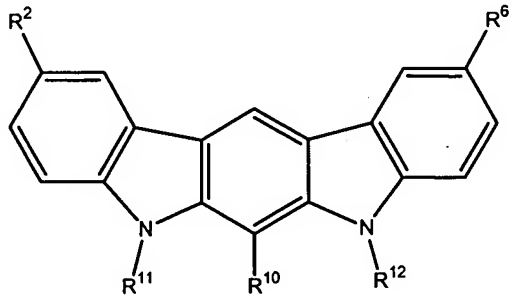
R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, and R^{10} are substituents independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl, C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24} alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms; and

R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl,

with the provisos that: at least one of R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, and R^{12} is other than hydrogen; and when R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 are selected from hydrogen, halo, alkyl, and alkoxy, then R^{11} and R^{12} are other than hydrogen and alkyl.

2. The compound of claim 1, wherein R^1, R^3, R^4, R^5, R^7, R^8, and R^9 are hydrogen, such that the compound has the structure of formula (Ia)

(Ia)



3. The compound of claim 2, wherein R^2 and R^6 are independently selected from the group consisting of hydrogen, halo, hydroxyl, sulfhydryl, C_1-C_{12} alkyl, C_2-C_{12} alkenyl, C_1-C_{12} alkoxy, C_5-C_{20} aryloxy, C_2-C_{12} alkylcarbonyl, C_6-C_{20} arylcarbonyl, C_2-C_{12} acyloxy, C_2-C_{12} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, C_2-C_{12} alkylcarbonato, carboxy, carbamoyl, mono-(C_1-C_{12} alkyl)-substituted carbamoyl, di-(C_1-C_{12} alkyl)-substituted carbamoyl, amino, mono- and di-(C_1-C_{12} alkyl)-substituted amino, C_2-C_{12} alkylamido, C_1-C_{12} alkylsulfanyl, C_1-C_{12} alkylsulfinyl, and C_1-C_{12} alkylsulfonyl.

4. The compound of claim 3, wherein R^2 and R^6 are independently selected from the group consisting of halo, C_1-C_{12} alkyl, C_1-C_{12} alkoxy, C_2-C_{12} alkoxycarbonyl, C_2-C_{12} alkylcarbonato, carbamoyl, mono-(C_1-C_{12} alkyl)-substituted carbamoyl, di-(C_1-C_{12} alkyl)-substituted carbamoyl, C_1-C_{12} alkylsulfanyl, C_1-C_{12} alkylsulfinyl, and C_1-C_{12} alkylsulfonyl.

5. The compound of claim 2, wherein R^{10} is C_1-C_{12} alkyl, C_1-C_{12} haloalkyl, C_1-C_{12} alkoxy, C_1-C_{12} alkylsulfanyl, C_2-C_{12} alkoxycarbonyl, or C_2-C_{12} alkylcarbonato.

6. The compound of claim 2, wherein R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{12} alkyl, C_2-C_{12} alkoxycarbonyl, amino-substituted C_1-C_{12}

alkyl, (C_1-C_{12} alkylamino)-substituted C_1-C_{12} alkyl, and di-(C_1-C_{12} alkyl)amino)-substituted C_1-C_{12} alkyl.

7. The compound of claim 1, wherein at least one of R^2, R^6, and R^{10} is C_2-C_{12} alkoxycarbonyl or C_2-C_{12} alkylcarbonato.

8. The compound of claim 7, wherein at least one of R^2, R^6, and R^{10} is C_2-C_6 alkoxycarbonyl or C_2-C_6 alkylcarbonato.

9. The compound of claim 2, wherein:

R^2 and R^6 are independently selected from hydrogen and C_2-C_6 alkoxycarbonyl;

R^{10} is halo, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkylsulfanyl, C_2-C_6 alkoxycarbonyl, or C_2-C_6 alkylcarbonato; and

R^{11} and R^{12} are independently selected from hydrogen and C_1-C_6 alkyl.

10. The compound of claim 9, wherein:

R^2 and R^6 are independently selected from hydrogen and ethoxycarbonyl;

R^{10} is hydrogen, methoxy, ethoxycarbonyl, ethylcarbonato, or perfluorinated C_1-C_6 alkyl; and

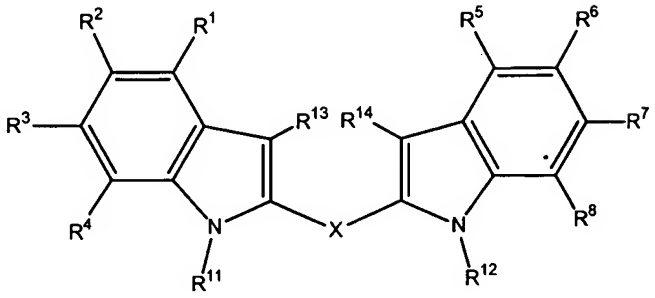
R^{11} and R^{12} are hydrogen.

11. The compound of claim 10, wherein R^2, R^6, and R^{10} are ethoxycarbonyl.

12. The compound of claim 10, wherein R^2 and R^6 are ethoxycarbonyl and R^{10} is heptafluoro-(n-propyl).

13. The compound of claim 10, wherein R^2 and R^6 are ethoxycarbonyl and R^{10} is methoxy.

14. A compound having the structure of formula (II)

(II) 

wherein:

R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl, C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24} alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms, with the proviso that one but not both of R^2 and R^6 can be amino, mono-substituted amino, or di-substituted amino;

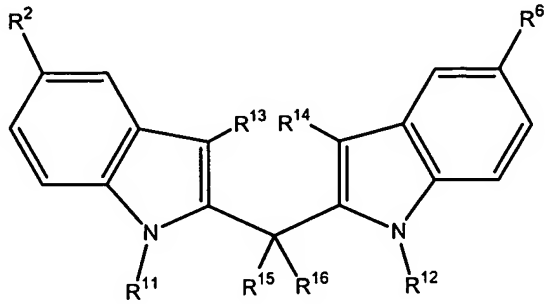
R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl;

R^{13} and R^{14} are defined as for R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8, with the proviso that at least one of R^{13} and R^{14} is other than hydrogen; and

X is O, S, arylene, heteroarylene, $CR^{15}R^{16}$ or NR^{17} wherein R^{15} and R^{16} are hydrogen, C_1-C_6 alkyl, or together form $=CR^{18}R^{19}$ where R^{18} and R^{19} are hydrogen or C_1-C_6 alkyl, and R^{17} is as defined for R^{11} and R^{12}.

15. The compound of claim 14, wherein R^1, R^3, R^4, R^5, R^7, and R^8 are hydrogen, and X is $CR^{15}R^{16}$, such that the compound has the structure of formula (IIa)

(IIa)



16. The compound of claim 15, wherein R^2 and R^6 are independently selected from the group consisting of hydrogen, halo, hydroxyl, sulfhydryl, C_1-C_{12} alkyl, C_2-C_{12} alkenyl, C_1-C_{12} alkoxy, C_5-C_{20} aryloxy, C_2-C_{12} alkylcarbonyl, C_6-C_{20} arylcarbonyl, C_2-C_{12} acyloxy, C_2-C_{12} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, C_2-C_{12} alkylcarbonato, carboxy, carbamoyl, mono-(C_1-C_{12} alkyl)-substituted carbamoyl, di-(C_1-C_{12} alkyl)-substituted carbamoyl, amino, mono- and di-(C_1-C_{12} alkyl)-substituted amino, C_2-C_{12} alkylamido, C_1-C_{12} alkylsulfanyl, C_1-C_{12} alkylsulfinyl, and C_1-C_{12} alkylsulfonyl.

17. The compound of claim 16, wherein R^2 and R^6 are independently selected from the group consisting of halo, C_1-C_{12} alkyl, C_1-C_{12} alkoxy, C_2-C_{12} alkoxycarbonyl, C_2-C_{12} alkylcarbonato, carbamoyl, mono-(C_1-C_{12} alkyl)-substituted carbamoyl, di-(C_1-C_{12} alkyl)-substituted carbamoyl, C_1-C_{12} alkylsulfanyl, C_1-C_{12} alkylsulfinyl, and C_1-C_{12} alkylsulfonyl.

18. The compound of claim 17, wherein at least one of R^2 and R^6 is C_2-C_{12} alkoxycarbonyl or C_2-C_{12} alkylcarbonato.

19. The compound of claim 15, wherein R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{12} alkyl, C_2-C_{12} alkoxycarbonyl, amino-substituted C_1-C_{12}

alkyl, (C_1-C_{12} alkylamino)-substituted C_1-C_{12} alkyl, and di-(C_1-C_{12} alkyl)amino-substituted C_1-C_{12} alkyl.

20. The compound of claim 15, wherein R^{13} and R^{14} are independently selected from the group consisting of hydrogen, C_1-C_{12} alkyl, C_1-C_{12} alkoxy, and C_2-C_{12} alkoxycarbonyl.

21. The compound of claim 15, wherein R^{15} and R^{16} are independently selected from hydrogen and C_1-C_{12} alkyl, or together form $=CR^{18}R^{19}$ where R^{18} and R^{19} are hydrogen or C_1-C_6 alkyl.

22. The compound of claim 15, wherein:

R^2 and R^6 are independently selected from hydrogen and C_2-C_6 alkoxycarbonyl;

R^{11} and R^{12} are independently selected from hydrogen and C_1-C_6 alkyl;

R^{13} and R^{14} are independently selected from hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, and C_2-C_6 alkoxycarbonyl; and

R^{15} and R^{16} are independently selected from hydrogen and C_1-C_6 alkyl, or together form $=CH_2$.

23. The compound of claim 22, wherein:

R^2 and R^6 are independently selected from hydrogen and ethoxycarbonyl;

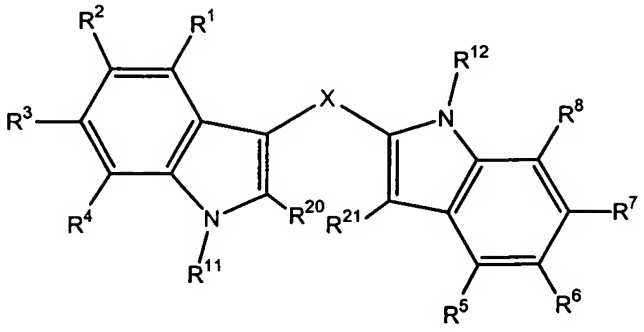
R^{11} and R^{12} are hydrogen;

R^{13} and R^{14} are independently selected from hydrogen, methyl, and ethoxycarbonyl; and

R^{15} and R^{16} are hydrogen.

24. The compound of claim 23, wherein R^2 and R^6 are ethoxycarbonyl.

25. A compound having the structure of formula (III)

(III) 

wherein:

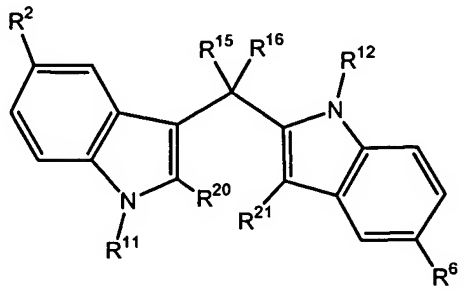
R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^{20}, and R^{21} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl; C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24} alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms;

R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl; and

X is O, S, arylene, heteroarylene, $CR^{15}R^{16}$ or NR^{17} wherein R^{15} and R^{16} are hydrogen, C_1-C_6 alkyl, or together form $=CR^{18}R^{19}$ where R^{18} and R^{19} are hydrogen or C_1-C_6 alkyl, and R^{17} is as defined for R^{11} and R^{12}.

26. The compound of claim 25, wherein R^1, R^3, R^4, R^5, R^7, and R^8 are hydrogen, and X is $CR^{15}R^{16}$, such that the compound has the structure of formula (IIIa)

(IIIa)



27. The compound of claim 26, wherein R^2 and R^6 are independently selected from the group consisting of hydrogen, halo, hydroxyl, sulfhydryl, C_1-C_{12} alkyl, C_2-C_{12} alkenyl, C_1-C_{12} alkoxy, C_5-C_{20} aryloxy, C_2-C_{12} alkylcarbonyl, C_6-C_{20} arylcarbonyl, C_2-C_{12} acyloxy, C_2-C_{12} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, C_2-C_{12} alkylcarbonato, carboxy, carbamoyl, mono-(C_1-C_{12} alkyl)-substituted carbamoyl, di-(C_1-C_{12} alkyl)-substituted carbamoyl, amino, mono- and di-(C_1-C_{12} alkyl)-substituted amino, C_2-C_{12} alkylamido, C_1-C_{12} alkylsulfanyl, C_1-C_{12} alkylsulfinyl, and C_1-C_{12} alkylsulfonyl.

28. The compound of claim 27, wherein R^2 and R^6 are independently selected from the group consisting of halo, C_1-C_{12} alkyl, C_1-C_{12} alkoxy, C_2-C_{12} alkoxycarbonyl, C_2-C_{12} alkylcarbonato, carbamoyl, mono-(C_1-C_{12} alkyl)-substituted carbamoyl, di-(C_1-C_{12} alkyl)-substituted carbamoyl, C_1-C_{12} alkylsulfanyl, C_1-C_{12} alkylsulfinyl, and C_1-C_{12} alkylsulfonyl.

29. The compound of claim 28, wherein at least one of R^2 and R^6 is C_2-C_{12} alkoxycarbonyl or C_2-C_{12} alkylcarbonato.

30. The compound of claim 26, wherein R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{12} alkyl, C_2-C_{12} alkoxycarbonyl, amino-substituted C_1-C_{12}

alkyl, (C_1-C_{12} alkylamino)-substituted C_1-C_{12} alkyl, and di-(C_1-C_{12} alkyl)amino-substituted C_1-C_{12} alkyl.

31. The compound of claim 26, wherein R^{15} and R^{16} are independently selected from hydrogen and C_1-C_{12} alkyl, or together form $=CR^{18}R^{19}$ where R^{18} and R^{19} are hydrogen or C_1-C_6 alkyl.

32. The compound of claim 26, wherein R^{20} and R^{21} are independently selected from the group consisting of hydrogen, C_1-C_{12} alkyl, C_1-C_{12} alkoxy, and C_2-C_{12} alkoxycarbonyl.

33. The compound of claim 26, wherein:

R^2 and R^6 are independently selected from hydrogen and C_2-C_6 alkoxycarbonyl;

R^{11} and R^{12} are independently selected from hydrogen and C_1-C_6 alkyl;

R^{15} and R^{16} are independently selected from hydrogen, C_1-C_6 alkyl, or together form $=CH_2$; and

R^{20} and R^{21} are independently selected from hydrogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, and C_2-C_6 alkoxycarbonyl.

34. The compound of claim 33, wherein:

R^2 and R^6 are independently selected from hydrogen and ethoxycarbonyl;

R^{11} and R^{12} are hydrogen;

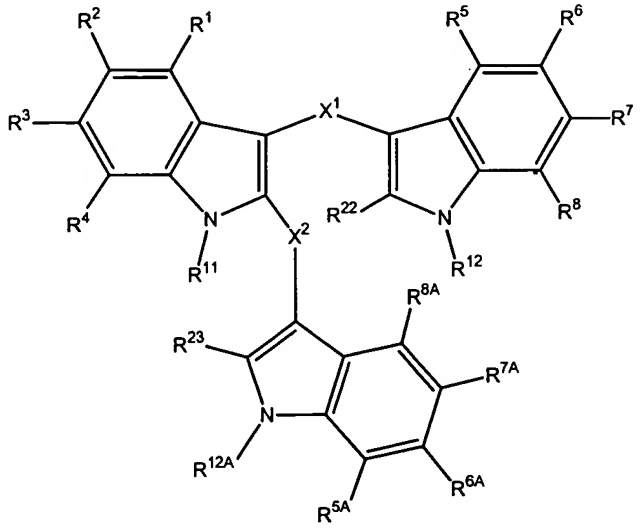
R^{15} and R^{16} are hydrogen; and

R^{20} and R^{21} are independently selected from hydrogen, methyl, and ethoxycarbonyl.

35. The compound of claim 34, wherein R^2 and R^6 are ethoxycarbonyl.

36. A compound having the structure of formula (IV)

(IV)



wherein:

R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^{5A}, R^{6A}, R^{7A}, R^{8A}, R^{22} and R^{23} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl, C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24} alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms;

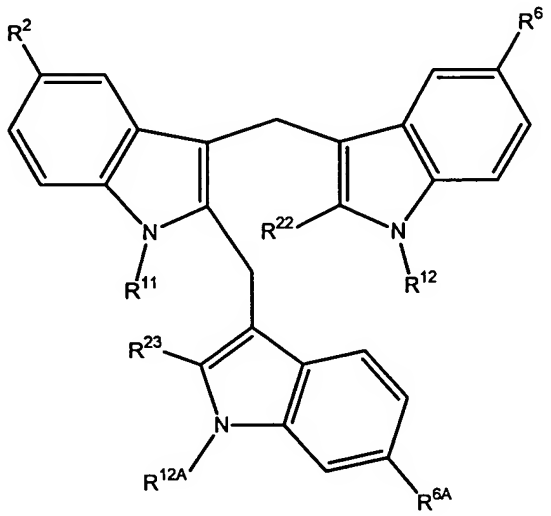
R^{11}, R^{12}, and R^{12A} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl; and

X^1 and X^2 are independent selected from O, S, arylene, heteroarylene, $CR^{15}R^{16}$ and NR^{17} wherein R^{15} and R^{16} are hydrogen, C_1-C_6 alkyl, or together form $=CR^{18}R^{19}$ where R^{18} and R^{19} are hydrogen or C_1-C_6 alkyl, and R^{17} is as defined for R^{11} and R^{12},

with the proviso that at least one of R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^{5A}, R^{6A}, R^{7A}, R^{8A}, R^{11}, R^{22} and R^{23} is other than hydrogen.

37. The compound of claim 36, wherein R^1, R^3, R^4, R^5, R^7, R^8, R^{5A}, R^{7A}, and R^{8A} are hydrogen, and X^1 and X^2 are CH_2, such that the compound has the structure of formula (IVa)

(IVa)



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with the proviso that at least one of R^2, R^6, R^{6A}, R^{11}, R^{12}, R^{12A}, R^{22} and R^{23} is other than hydrogen.

38. The compound of claim 37, wherein R^2, R^6, R^{6A}, R^{22}, and R^{23} are independently selected from the group consisting of halo, C_1-C_{12} alkyl, C_1-C_{12} alkoxy, C_2-C_{12} alkoxycarbonyl, C_2-C_{12} alkylcarbonato, carbamoyl, mono-(C_1-C_{12} alkyl)-substituted carbamoyl, di-(C_1-C_{12} alkyl)-substituted carbamoyl, C_1-C_{12} alkylsulfanyl, C_1-C_{12} alkylsulfinyl, and C_1-C_{12} alkylsulfonyl.

39. The compound of claim 38, wherein at least one of R^2, R^6, R^{6A}, R^{22}, and R^{23} is C_2-C_{12} alkoxycarbonyl or C_2-C_{12} alkylcarbonato.

40. The compound of claim 37, wherein R^{11}, R^{12}, and R^{12A} are independently selected from the group consisting of hydrogen, C_1-C_{12} alkyl, C_2-C_{12} alkoxycarbonyl, amino-substituted C_1-C_{12} alkyl, (C_1-C_{12} alkylamino)-substituted C_1-C_{12} alkyl, and di-(C_1-C_{12} alkyl)amino-substituted C_1-C_{12} alkyl.

41. The compound of claim 37, wherein:

R^2, R^6, R^{6A}, R^{22}, and R^{23} are independently selected from hydrogen and C_2-C_6 alkoxycarbonyl; and

R^{11}, R^{12}, and R^{12A} are independently selected from hydrogen and C_1-C_6 alkyl.

42. The compound of claim 41, wherein:

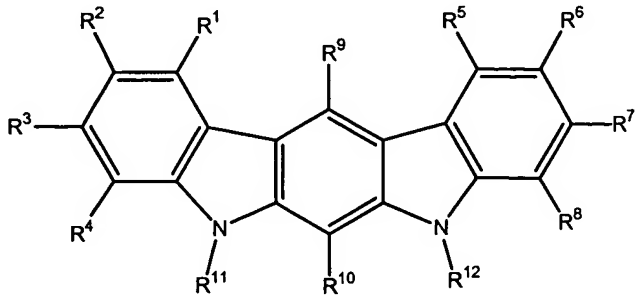
R^2, R^6, R^{6A}, R^{22}, and R^{23} are independently selected from hydrogen and ethoxycarbonyl;

R^{11}, R^{12}, and R^{12A} are hydrogen;

43. The compound of claim 42, wherein at least one of R^2, R^6, R^{6A}, R^{22}, and R^{23} is ethoxycarbonyl.

44. A pharmaceutical composition comprising a therapeutically effective amount of a compound having the structure of formula (I)

(I)



wherein:

R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, and R^{10} are substituents independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl, C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24} alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl,

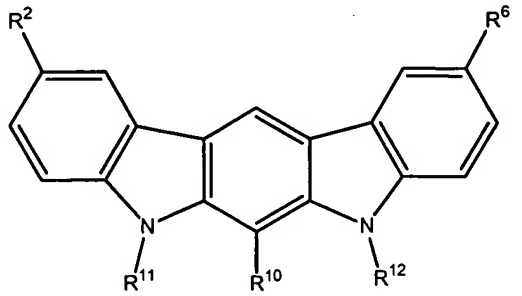
halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms; and

R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl,

with the proviso that at least one of R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, and R^{12} is other than hydrogen.

45. The composition of claim 44, wherein R^1, R^3, R^4, R^5, R^7, R^8, and R^9 are hydrogen, such that the compound has the structure of formula (Ia)

(Ia)



46. The composition of claim 44, wherein the pharmaceutically acceptable carrier is suitable for oral administration and the composition comprises an oral dosage form.

47. The composition of claim 46, wherein the oral dosage form is a tablet.

48. The composition of claim 46, wherein the oral dosage form is a capsule.

49. The composition of claim 44, wherein the pharmaceutically acceptable carrier is suitable for parenteral administration and the composition comprises a parenterally administrable formulation.

50. The composition of claim 45, wherein the pharmaceutically acceptable carrier is suitable for oral administration and the composition comprises an oral dosage form.

51. The composition of claim 50, wherein the oral dosage form is a tablet.

52. The composition of claim 50, wherein the oral dosage form is a capsule.

53. The composition of claim 45, wherein the pharmaceutically acceptable carrier is suitable for parenteral administration and the composition comprises a parenterally administrable formulation.

54. A pharmaceutical composition comprising the compound of any one of claims 14, 15, 25, 26, 36, and 37 in combination with a pharmaceutically acceptable carrier.

55. The composition of claim 54, wherein the pharmaceutically acceptable carrier is suitable for oral administration and the composition comprises an oral dosage form.

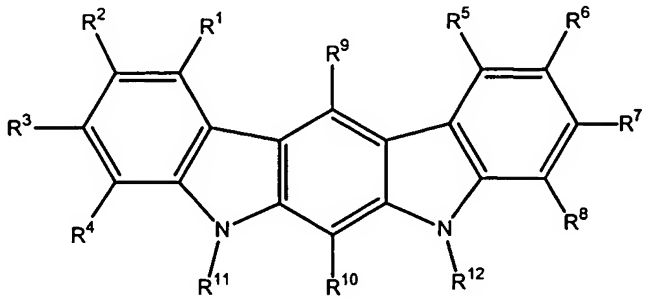
56. The composition of claim 55, wherein the oral dosage form is a tablet.

57. The composition of claim 55, wherein the oral dosage form is a capsule.

58. The composition of claim 54, wherein the pharmaceutically acceptable carrier is suitable for parenteral administration and the composition comprises a parenterally administrable formulation.

59. A method for preventing or treating cancer in a mammalian individual, comprising administering to the individual a therapeutically effective amount of a compound having the structure of formula (I)

(I)



wherein:

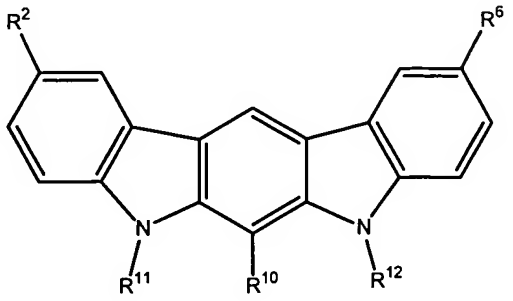
R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, and R^{10} are substituents independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl, C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24} alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms; and

R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl,

with the proviso that at least one of R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, and R^{12} is other than hydrogen.

60. The method of claim 59, wherein R^1, R^3, R^4, R^5, R^7, R^8, and R^9 are hydrogen, such that the compound has the structure of formula (Ia)

(Ia)



61. The method of claim 59, wherein the cancer is an estrogen-dependent cancer.

62. The method of claim 61, wherein the cancer is of the breast, cervix, uterus, ovaries, or endometrium.

63. The method of claim 62, wherein the cancer is breast cancer.

64. The method of claim 62, wherein the cancer is ovarian cancer.

65. The method of claim 61, wherein the cancer is metastasized.

66. The method of claim 61, wherein the cancer is a drug-resistant cancer.

67. The method of claim 66, wherein the cancer exhibits multiple drug resistance.

68. The method of claim 59, wherein the cancer is a non-estrogen-dependent cancer.

69. The method of claim 68, wherein the cancer is of the prostate, liver, lung, colon or pancreas.

70. The method of claim 68, wherein the cancer is metastasized.

71. The method of claim 68, wherein the cancer is a drug-resistant cancer.

72. The method of claim 71, wherein the cancer exhibits multiple drug resistance.

73. The method of claim 60, wherein the cancer is an estrogen-dependent cancer.

74. The method of claim 73, wherein the cancer is of the breast, cervix, uterus, ovaries, or endometrium.

75. The method of claim 74, wherein the cancer is breast cancer.

76. The method of claim 74, wherein the cancer is ovarian cancer.

77. The method of claim 73, wherein the cancer is metastasized.

78. The method of claim 73, wherein the cancer is a drug-resistant cancer.

79. The method of claim 78, wherein the cancer exhibits multiple drug resistance.

80. The method of claim 60, wherein the cancer is a non-estrogen-dependent cancer.

81. The method of claim 80, wherein the cancer is of the prostate, liver, lung, colon or pancreas.

82. The method of claim 80, wherein the cancer is metastasized.

83. The method of claim 80, wherein the cancer is a drug-resistant cancer.

84. The method of claim 83, wherein the cancer exhibits multiple drug resistance.

85. A method for preventing or treating cancer in a mammalian individual, comprising administering to the individual a therapeutically effective amount of the compound of any one of claims 14, 15, 25, 26, 36, and 37.

86. The method of claim 85, wherein the cancer is an estrogen-dependent cancer.

87. The method of claim 86, wherein the cancer is of the breast, cervix, uterus, ovaries, or endometrium.

88. The method of claim 87, wherein the cancer is breast cancer.

89. The method of claim 87, wherein the cancer is ovarian cancer.

90. The method of claim 86, wherein the cancer is metastasized.

91. The method of claim 86, wherein the cancer is a drug-resistant cancer.

92. The method of claim 91, wherein the cancer exhibits multiple drug resistance.

93. The method of claim 85, wherein the cancer is a non-estrogen-dependent cancer.

94. The method of claim 93, wherein the cancer is of the prostate, liver, lung, colon or pancreas.

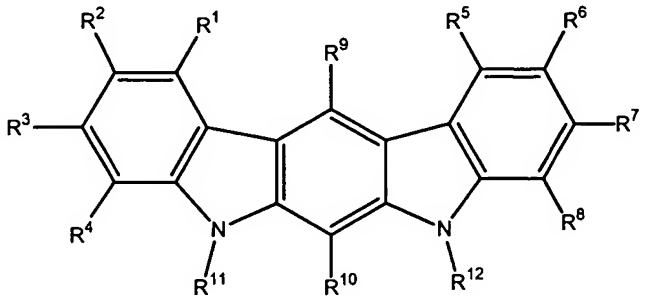
95. The method of claim 93, wherein the cancer is metastasized.

96. The method of claim 93, wherein the cancer is a drug-resistant cancer.

97. The method of claim 96, wherein the cancer exhibits multiple drug resistance.

98. A method for treating an individual predisposed to or suffering from an estrogen-related condition, disease or disorder other than an estrogen-dependent cancer, comprising administering to the individual a therapeutically effective amount of a compound having the structure of formula (I)

(I)



wherein:

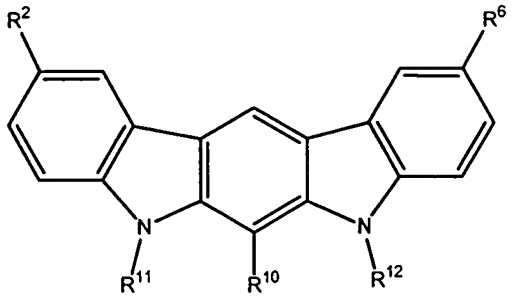
R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, and R^{10} are substituents independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl, C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24} alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms; and

R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl,

with the proviso that at least one of R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, and R^{12} is other than hydrogen.

99. The method of claim 98, wherein R^1, R^3, R^4, R^5, R^7, R^8, and R^9 are hydrogen, such that the compound has the structure of formula (Ia)

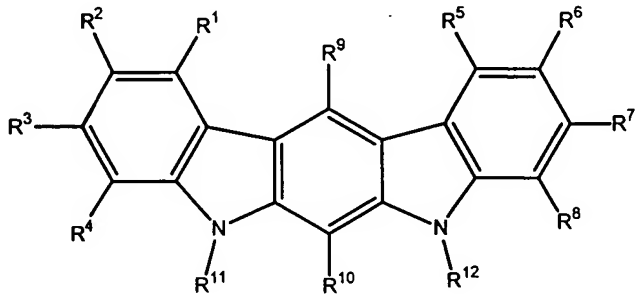
(Ia)



100. A method for treating an individual predisposed to or suffering from an estrogen-related condition, disease or disorder other than an estrogen-dependent cancer, comprising administering to the individual a therapeutically effective amount of the compound of any one of claims 14, 15, 25, 26, 36, and 37.

101. A method for treating an individual predisposed to or suffering from a viral infection, comprising administering to the individual a therapeutically effective amount of a compound having the structure of formula (I)

(I)



wherein:

R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, and R^{10} are substituents independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkenyl, C_2-C_{24} alkynyl, C_5-C_{20} aryl, C_6-C_{24} alkaryl, C_6-C_{24} aralkyl, halo, hydroxyl, sulfhydryl, C_1-C_{24} alkoxy, C_2-C_{24} alkenyloxy, C_2-C_{24}

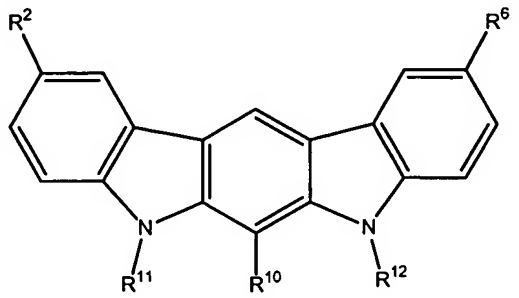
alkynyloxy, C_5-C_{20} aryloxy, acyl, acyloxy, C_2-C_{24} alkoxycarbonyl, C_6-C_{20} aryloxycarbonyl, halocarbonyl, C_2-C_{24} alkylcarbonato, C_6-C_{20} arylcarbonato, carboxy, carboxylato, carbamoyl, mono-(C_1-C_{24} alkyl)-substituted carbamoyl, di-(C_1-C_{24} alkyl)-substituted carbamoyl, mono-substituted arylcarbamoyl, thiocarbamoyl, carbamido, cyano, isocyano, cyanato, isocyanato, isothiocyanato, azido, formyl, thioformyl, amino, mono- and di-(C_1-C_{24} alkyl)-substituted amino, mono- and di-(C_5-C_{20} aryl)-substituted amino, C_2-C_{24} alkylamido, C_5-C_{20} arylamido, imino, alkylimino, arylimino, nitro, nitroso, sulfo, sulfonato, C_1-C_{24} alkylsulfanyl, arylsulfanyl, C_1-C_{24} alkylsulfinyl, C_5-C_{20} arylsulfinyl, C_1-C_{24} alkylsulfonyl, C_5-C_{20} arylsulfonyl, phosphono, phosphonato, phosphinato, phospho, phosphino, and combinations thereof, and further wherein any two adjacent (*ortho*) substituents may be linked to form a cyclic structure selected from five-membered rings, six-membered rings, and fused five-membered and/or six-membered rings, wherein the cyclic structure is aromatic, alicyclic, heteroaromatic, or heteroalicyclic, and has zero to 4 non-hydrogen substituents and zero to 3 heteroatoms; and

R^{11} and R^{12} are independently selected from the group consisting of hydrogen, C_1-C_{24} alkyl, C_2-C_{24} alkoxycarbonyl, amino-substituted C_1-C_{24} alkyl, (C_1-C_{24} alkylamino)-substituted C_1-C_{24} alkyl, and di-(C_1-C_{24} alkyl)amino-substituted C_1-C_{24} alkyl,

with the proviso that at least one of R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, and R^{12} is other than hydrogen.

102. The method of claim 101, wherein R^1, R^3, R^4, R^5, R^7, R^8, and R^9 are hydrogen, such that the compound has the structure of formula (Ia)

(Ia)



103. A method for treating an individual predisposed to or suffering from a viral infection, comprising administering to the individual a therapeutically effective amount of the compound of any one of claims 14, 15, 25, 26, 36, and 37.

104. The method of claim 101, wherein the viral infection is caused by a DNA virus.

105. The method of claim 104, wherein the DNA virus is human papillomavirus.

106. The method of claim 101, wherein the viral infection is a retroviral infection.

107. The method of claim 102, wherein the viral infection is caused by a DNA virus.

108. The method of claim 107, wherein the DNA virus is human papillomavirus.

109. The method of claim 102, wherein the viral infection is a retroviral infection.

110. The method of claim 103, wherein the viral infection is caused by a DNA virus.

111. The method of claim 110, wherein the DNA virus is human papillomavirus.

112. The method of claim 110, wherein the viral infection is a retroviral infection.

113. A method for synthesizing a 6-substituted 5,7-dihydro-indolo[2,3-b]carbazole compound, comprising treating an N-protected 3,3′-diindolylmethane with an organolithium reagent in the presence of a reactant selected from the group consisting of an anhydride, an acyl chloride, an alkyl carbonate, an aryl carbonate, an alkyl chloroformate, and an aryl chloroformate.

114. The method of claim 113, wherein the organolithium reagent is lithium 2,2,6,6-tetramethylpiperidide or lithium diisopropylamide.

115. The method of claim 113, wherein the anhydride has the structure R-(CO)-O-(CO)-R, wherein R is alkyl or substituted alkyl.

116. The method of claim 115, wherein R is alkyl.

117. The method of claim 116, wherein R is methyl.

118. The method of claim 115, wherein R is substituted alkyl.

119. The method of claim 118, wherein R is fluorinated alkyl.

120. The method of claim 119, wherein R is perfluorinated lower alkyl.

121. The method of claim 113, wherein the reactant is an alkyl chloroformate, such that the 6-substituted 5,7-dihydro-indolo[2,3-b]carbazole is a 6-alkylcarbonato-5,7-dihydro-indolo[2,3-b]carbazole.

122. The method of claim 113, wherein the reactant is an alkyl chloroformate and the reaction is carried out in the presence of acid, such that the 6-substituted 5,7-dihydro-indolo[2,3-b]carbazole is a 6-hydroxy-5,7-dihydro-indolo[2,3-b]carbazole.

123. The method of claim 122, further comprising contacting the 6-hydroxy-5,7-dihydro-indolo[2,3-b]carbazole with an alkylating reagent to provide a 6-alkoxy-5,7-dihydro-indolo[2,3-b]carbazole.